MERKULOVICH, V.A., inzh.

Efficient use of the D-272 cutting and mixing machine. Avt.dor. 20 no.8:29-30 Ag '57. (MIRA 12:4)
(Road machinery)

MERKULOVICH, V.A., inzh.

The D-396 mounted ground crushing and mixing machine. Stroi. i dor.mashinostr. 4 no.2:13-14 F '59. (MIRA 12:2)
(Road machinery)

MERKULOVICH, V.A., inzh.

The D-465 motor grader. Stroi. i dor.mashinostr. 4 no.4:17-18 Ap '59. (MIRA 12:5)
(Graders (Earthmoving machinery))

VOSHCHENKO, B.I., inzh.; MERKULOVICH, V.A., inzh.

Mixing soil with binders and aggregates by the D-396 and D-445 ground-crushing and mixing machines. Stroi.i dor.mashinostr. 4 no.10:16-17 O '59. (MIRA 13:2)
(Roads, Soil-cement)

KANTOR, M.M., kand.tekhn.nauk; SERPIK, N.M., inzh.; VENTSKOVSKIY, Z.L., inzh.; MERKULOVICH, V.A., inzh.

Investigating causes of wear of transmission gear boxes of the D-265 motor grader. Stroi.i dor.mashinostr. 4 no.12: 17-19 D '59. (MIRA 13:3)
(Road machinery--Transmission devices)

MERKULOVICH, V.A., inzh.

New D-531 road cutter mounted on a self-propelled grader. Stroi. i dor. mash. 6 no.3:32-33 Mr '61. (MIRA 14:4)
(Graders (Earthmoving machinery))

MERKULOVICH, V.A., kand.; [illegible], A.N., kand.

Selecting [illegible]. Strel. i voor. mash. 9 no.11:19-20 N '61. (MIRA 14:11)

MERKULOW, B.

MERKULOW, B.

Developmental trends toward the complete mechanization of Soviet mines.

p. 371 (Przeblad Gorniczy. Vol. 12, no. 10, Oct. 1958. Katowice, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

SOLOV'YEVA, S.V.; MERKUL'TSEVA, V.F.

Accelerated determination of moisture in green malt. Spirt. prom. 27 no.6:20-21 '61. (MIRA 14:9)

(Malt)

KARLOV, V.I., kand.ist.nauk; MERKULYAYEV, P.A., kand.ist.nauk

Fortieth anniversary of the Great October Socialist Revolution.
Izv. vys. ucheb. zav.; pri. no.1:5-11 '58. (MIRA 11:5)
(Russia--Economic conditions)

POLOZ, K., mekhanik-teplotekhnik; MERKUL'YEV, G., smennyy tekhnik

Excess staff at an enterprise. Sots. trud 7 no.8 129-130 Ag '62. (MIRA 15:10)

1. Kerchenskiy mekhanizirovannyy steklotarnyy zavod Krymskogo soveta narodnogo khozyaystva.

(Kerch Peninsula--Glass manufacture)

MERKUL'YEV, K. V.

Merkul'yev, K. V. -- "Automatic measurement and recording of the SO_2 content in turmeric acid," Materialy Tsentr. nauch.-issled. in-ta bumazh. prom-sti, Issue 37, 1948, p. 155-62

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 18, 1949)

MERKUL'YEV, V.A.

Use of elements of practical application in the teaching of geography. Geog.v shkole no.1:43-46 Ja-F '54. (MLRA 7:1)
(Geography--Study and teaching)

32000
S/089/62/012/001/003/019
B102/B138

26.2243

AUTHORS: Antonov, A. V., Granatkin, B. V., Merkul'yev, Yu. A., Smolik, Ch. K.

TITLE: Pulse method study of neutron diffusion and thermalization in water and ice in a wide temperature range

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 22 - 29

TEXT: The method, apparatus and results are described, of the investigation of non-steady neutron diffusion in water and ice at 0.5 - 286°C and down to -196°C. The pulse method used has been described by Dardel (Phys. Rev, 96, 1245, 1954) and I. M. Frank. The neutrons, from $T(d,n)He^4$ reactions, were modulated with a repetition frequency of 250 cps at a pulse duration of 15 μsec. The neutrons were recorded with a $B^{10}F^3$ counter, the counter pulses were fed to a 20-channel time analyzer (dead time 10 μsec), designed by I. V. Shtranikh, A. Ye. Voronkov, A. M. Volkov and K. P. Dudareva. An apparatus was designed for studying neutron diffusion in water at 0.5, 3, 7, 20, 71, 98, 136, 138, 159, 200, 250 and

Card 1/4

Pulse method study of...

286°C. The following parameters were measured: neutron life (T) and diffusion coefficient (D), coefficient of diffusion cooling (C) non-diffusion correction (d) (N. Sjöstrand. Arkiv fys. 15, 147 (1959)) transport free path (λ_{tr}), transport cross section (σ_{tr}), diffusion length (L) and mean cosine of neutron scattering angle ($\overline{\cos\theta}$). For water at 21°C the following diffusion parameters were measured: T = 207 ± 7 μsec, D = $(0.35 \pm 0.01)\cdot 10^5$ cm^2/sec, C-d = $(0.04 - 0.01)\cdot 10^5$ cm^4/sec. The diffusion parameters for ice at -196°C are given in the table. The experimental values were approximated by means of the following formulas:

$$\frac{D(t^\circ C)}{D(21^\circ C)} = (0{,}934 \pm 0{,}028) + (0{,}289 \pm 0{,}009)\,10^{-2}t + (0{,}106 \pm 0{,}03)\,10^{-4}t^2. \quad (5),$$

$\overline{\cos\theta} = 1 - \lambda_s/\lambda_{tr}$ (λ_s - scattering mean free path),

Card 2/4

32000
S/089/62/012/001/003/019
B102/B138

Pulse method study of...

$$\frac{L(t)}{L(22^\circ\mathrm{C})} = \frac{1}{Q}\left[\frac{t+273,1}{294,1}\right]^{1/2} \times \left[\frac{1,0614}{1+0,0614\left[\frac{t+273,1}{294,1}\right]^{1/2}}\right]^{1/2}, \quad (9)$$

$$\frac{(C-d)(t)}{(C-d)(21^\circ\mathrm{C})} = (0,987 \pm 0,098) + (0,611 \pm 0,031)\,10^{-3}\,t + (0,548 \pm 0,104)\,10^{-4}\,t^2. \quad (10)$$

$$\varepsilon = \frac{1}{6}\frac{D^2}{C}\frac{\bar{\lambda}_s}{\bar{v}}\left(1+\bar{v}\frac{d\ln\bar{\lambda}_{tr}}{d\bar{v}}\right)\times\left(2\frac{E_n}{kT}-3\right), \quad (11)$$

(ε - energy transferred by one neutron per collision). The heat-exchange constant $\gamma = D^2/C$ was $(3.10 \pm 0.35)\cdot 10^5$ sec^{-1}, $\varepsilon = 0.23 \pm 0.07$. Conclusions: Anisotropy in the angular distribution of scattered neutrons increases with temperature. In water at room temperature neutron thermalization satisfies Dardel's theory (Trans. Roy. Inst. Technol. No. 75, 1954) when the deviation of the neutron temperature from equilibrium is only small. In ice at -196°C the neutron gas is in equilibrium with the ice. Equilibrium is established 45 - 75 μsec after slowing down begins. This

Card 3/4

32000
S/089/62/012/001/003/019
B102/B138

Pulse method study of...

slowing-down time is much greater than in water. The authors thank I. M. Frank for interest, B. V. Makarov, V. M. Gulikov, V. V. Talakvadze, and Ye. A. Velichenkova for assistance. There are 7 figures, 1 table, and 17 references: 3 Soviet and 14 non-Soviet. The four most recent references to English-language publications read as follows: K. Beckurts. Symposium on "In Pile Neutron Spectra and Pulsed Neutrons Methods". Denmark, 1960; D. Hughes et al. Phys. Rev., 119, 872 (1960); D. Hughes, R. Schwards. Neutron Cross Sections. New York, 1958; K. Rockey, S. Skolnik. Nucl. Sci. Engng, 8, 62 (1960).

SUBMITTED: July 1, 1961

Table

t, °C	ρ, г/см³	T, мксек	10^5 D, см²/сек	(C−d), 10^6 см⁴/сек	L, см	σ_{tr}, барн	λ_{tr}, см	$\overline{\cos\theta}$
−196	0,917±0,010	215±10	0,095±0,004	0,02±0,01	1,43±0,07	146±6	0,224±0,009	
—	—	222	0,105±0,004	0,025±0,10	1,53±0,08	132±6	0,248±0,010	0,10±0,15

Card 4/4

ANTONOV, A.V.; GRANATKIN, B.V.; MERKUL'YEV, Yu.A.; PUZANOV, V.V.; SMOLIK, Ch.K.

Neutron diffusion for water and ice at temperatures near 0°C and -80°C. Atom. energ. 13 no.4:373-374 O '62. (MIRA 15:9)
(Neutrons—Scattering)

MERKUROV, K.; TER-AVANESOV, Yu.

Shop of the chemical combine has been finished in eight months. Stroitel' no.7:3-5 Jl '59. (MIRA 12:10)

1. Glavnyy inzhener tresta Stalinogorskkhimuglestroy (for Merkurov). 2. Spetsial'nyy korrespondent zhurnala "Stroitel'(for Ter-Avanesov).

(Stalinogorsk--Chemical plants)
(Precast concrete constructions)

MERKUR'YEV, A F

1. A. F. MER'KUR'EV

2. USSR (600)

4. Bee Culture

7. Wintering bees on honeydew honey. Pchelovodstvo 30 no. 1. 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

S/196/61/000/010/028/037
E194/E155

AUTHORS: Pechuro, N.S., Merkur'yev, A.N., Grodzinskiy, E.Ya., and Sokolova, N.I.

TITLE: An investigation of physical-chemical changes occurring in organic media under the influence of electrical discharges. Decomposition of liquid organic media during spark machining of metals

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1961, 41, abstract 10K 236. (Symposium "Problems of electrical machining of materials", M., AS USSR, 1960, 14-24)

TEXT: The organic liquids used during spark machining of metals (ligroin, kerosine, oil etc.) are decomposed by electrical discharge. Investigations of the changes in the physico-chemical properties of petroleum products, Synthin and Esthonian shale pitch after prolonged electric spark treatment show extensive decomposition of their organic compounds accompanied by an increase in the content of sulphur components and evolution of acetylene, hydrogen and soot; there is an increase in specific gravity.

Card 1/2

An investigation of physical-chemical... S/196/61/000/010/028/037
E194/E155

viscosity, flash and fire points and refractive index. The investigations were carried out on a laboratory electric spark equipment with a follow-up control system maintaining constant conditions with a capacitance of 12.5-500 microfarads, a voltage of 100-200 V and a current of 1-5 A. The petroleum products were treated for 35 hours and the Synthin and pitch for 20 hours. Characteristics are given of the materials before and after treatment, with information about the influence of the construction and material of electrodes on the evolution of gas and about the possibility of using the treated fluids and gases in the chemical and rubber industries.
11 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

S/856/62/000/000/007/011
E194/E135

AUTHORS: Pechuro, N.S., and Merkur'yev, A.N.

TITLE: Investigation of the decomposition of organic liquids in transient electric discharges

SOURCE: Problemy elektricheskoy obrabotki materialov. Tsentr. nauchnoissl. labor. elek. obrab. mat. AN SSSR. Ed. by B.R. Lazarenko. Moscow, Izd-vo AN SSSR, 1962. 181-191

TEXT: Although much work has been done on the production of unsaturated hydrocarbons from natural and refinery gas, most acetylene is still made from carbide, which is inconvenient. The most promising ways of making acetylene are oxidative and thermal cracking and various processes involving electric discharges. Electrical discharges have mostly been applied to gas, but relatively little has been done on the electrical treatment of organic liquids. Following a review of earlier work, new work and preliminary qualitative results from its first stage are described. A petroleum product with a boiling range of 140-250 °C was cracked by transient low-voltage electric discharges employing

Card 1/3

Investigation of the decomposition..

intermediate conducting contacts in the form of graphite spheres between the main electrodes. The influence of the nature of the intermediate contacts on the output and composition of cracked gas was studied. The laboratory tests were run for up to one hour to avoid errors in assessment of acetylene due to its solubility in the liquid phase. The rectangular reaction vessel was made with transparent plastic; near the bottom of it were six horizontal electrodes of 20 or 40 mm diameter; the intermediate contact was by spheres 5-12 mm in diameter made from various grades of graphite. In principle, the liquid could be circulated but this was not done in the tests described. Supply was from five a.c. welding transformers which could be connected to obtain output voltages ranging from 60 to 300 V. Difficulties in measuring the power output in such a case are discussed. Operation was most stable when the number of intermediate contacts was large (~ 100), and stable conditions facilitate measurements. The gas evolved was of practically constant composition: acetylene and its homologues forming 29-32%; C_nH_{2n} 6-11%; C_nH_{2n+2} about 2-6%; and H_2, 52-58%.

Card 2/3

This composition was virtually independent of the applied voltage in the range 60-300 V. However, the production of gas was more efficient when, for a given voltage, the current was increased, or with higher voltage with a given mean current. The apparatus was run for about 5 hours to obtain a material balance and this showed that about 2.5 kg of liquid feed are required to produce 1 m^3 of acetylene. The cracked gas could be used directly to produce acetaldehyde with a satisfactory yield. The liquid phase remaining after treatment is unstable in colour on exposure to heat and light, and there is some increase in specific gravity, refractive index, iodine value and molecular weight. Some sludge forms. There are 7 figures and 3 tables.

Card 3/3

S/056/62/000/000/009/011
E194/E135

AUTHORS: Pechuro, N.S., and Merkur'yev, A.N.

TITLE: A study of the process of gas formation during the decomposition of organic liquids in low-voltage transient electric discharges

SOURCE: Problemy elektricheskoy obrabotki materialov. Tsentr. nauchnoissl. labor. elek. obrab. mat. AN SSSR. Ed. by B.R. Lazarenko. Moscow, Izd-vo AN SSSR, 1962. 199-206

TEXT: A high-speed camera developed by B.N. Zolotykh was used to study the process of gas-bubble formation by electric discharges through organic liquids. Camera type СКС-1 (SKS-1) made runs of 1 second duration taking 4000 frames per second. The subject was illuminated by lamps to a total wattage of 3.5 kW. Two test cells were made, of transparent plastic: one contained two graphite spherical electrodes with a 3 mm gap bridged by an intermediate contact in the form of a graphite sphere 8 - 9 mm diameter; the other had six main electrodes, 20 mm diameter, with five intermediate contacts made of graphite spheres 8 - 9 mm diameter,

Card 1/3

the arrangement being the same as was used in the study of the decomposition of organic liquids in electric discharges (present collection of articles, 181-191). Tests were made with a petroleum distillate of boiling range 140-250 °C and with ethanol. The voltage ranged from 60 to 180 V. Typical records of gas-bubble formation obtained at different voltages are illustrated and described. The processes were very similar whether ethanol or distillate were used but were much easier to observe with ethanol because less carbon was formed. High-speed films and oscillograms of the process were taken simultaneously with the multi-electrode cell and confirmed that several simultaneous discharges are recorded on the oscillogram as a single impulse. It was also found that gas bubbles and hydraulic shock have considerable influence in displacing the intermediate contacts during discharge. From the simultaneous films and oscillograms preliminary conclusions are drawn concerning the mechanism of discharge initiation and development. One kind of discharge initiation commences with breakdown of a microfilm of liquid dielectric between the intermediate contact and one of the

electrodes, the other electrode being in direct contact with the intermediate contact. This contact is broken down and a second channel opens up within 0.25-0.5 milliseconds. In other cases two discharge channels are formed simultaneously within 0.25 millisecs. This seems to occur when the voltage between the electrodes is high enough to break down both microfilms of dielectric simultaneously or when the output of the supply source is such that after the first breakdown there is a considerable increase in the discharge current, which immediately forms a second channel. Energy dissipation in the discharge channels gives rise to high temperatures which decompose the organic liquids with the formation of gaseous products. Under the action of the gas and electromagnetic forces the intermediate contact is forced away from the electrodes, extending both discharge channels, thus increasing the volume of liquid exposed to high temperatures. There are 11 figures.

Card 3/3

S/856/62/000/000/011/011
E194/E135

AUTHORS: Pechuro, N.S., and Merkur'yev, A.N.

TITLE: An investigation of transient electrical discharges used to decompose organic liquids

SOURCE: Problemy elektricheskoy obrabotki materialov. Tsentr. nauchnoissl. labor. elek. obrab. mat. AN SSSR. Ed. by B.R. Lazarenko. Moscow, Izd-vo AN SSSR, 1962. 214-219.

TEXT: During the investigation of the decomposition of organic liquids in transient electric discharges (present collection of articles, 181-191) it was decided to take oscillograms of current and voltage during the discharges, using an electromagnetic oscillograph type МПС-2 (MPO-2) with film speeds ranging from 250 to 5000 mm/sec. The open circuit voltage of supply could range from 60 to 300 V and heavy currents could be passed. It was clear from numerous oscillograms that when a single intermediate contact is used the current and voltage curves are very similar to those of a transient a.c. arc. Analysis of the oscillograms shows that there are two cases of initiation and development of interrupted

Card 1/ 3

An investigation of transient ...

discharge. In the first case, voltage is applied at the instant when the intermediate contact is directly on the electrodes; if the voltage is high enough the breakdown occurs instantaneously and the voltage falls. If the initial voltage is not high enough, breakdown occurs as soon as it has risen to the breakdown value. In the second case the intermediate contact is away from the electrode when the voltage is applied, and discharge is initiated when it approaches closely to the main electrodes, the actual conditions depending upon the instantaneous value of voltage at that time. Oscillograms were also taken when there were a number of intermediate contacts, and it was found that several discharges could occur simultaneously. In this case oscillograph elements were connected between the various pairs of electrodes with various numbers of intermediate contacts. In general, discharges are transient and follow one another at irregular intervals and they also vary in amplitude. However, on carrying out 100 successive discharges it was found that as the number of intermediate contacts is increased there is a change in the statistical distribution of duration, mean current and energy of individual

impulses. This suggests that in many cases a number of discharges occur simultaneously, the oscillograms recording only the mean current and voltage. Data are given about the discharge frequencies with various values of supply voltage under the particular experimental conditions used.
There are 7 figures and 2 tables.

Card 3/3

L 23396-66 EWP(j)/EWP(k)/EWT(m)/T/EWP(t) IJP(c) RM/DJ/JD
ACC NR: AP6000635 SOURCE CODE: UR/0407/65/000/001/0020/0036

33
32
B

AUTHOR: Merkur'yev, A. N. (Moscow); Pechuro, N. S. (Moscow); Royter, L. A. (Moscow); Gol'din, V. I. (Moscow); Pesin, O. Yu. (Moscow)

ORG: none

TITLE: Media for precision electroerosion machining of metals 14

SOURCE: Elektronnaya obrabotka materialov, no. 1, 1965, 20-36

TOPIC TAGS: electroerosion machining, metal machining

ABSTRACT: An experimental investigation of the effect of various interelectrode media on the process of electroerosion machining (EEM) of steels is described. Paraffin, naphthene, and aromatic hydrocarbons, mono-, di-, and tri-atomic alcohols, polyethyl-siloxanes (No. 3 and No. 5 silicones), kerosine, Estonian shale resin, and green soap were tested. It was found that the electrode erosion and wear depend on the medium and the power-supply source used. The best results were obtained with No. 3 silicone and tetralin used with longer pulses; the specific erosion increased with the discharge energy which enhanced the power efficiency of the

Card 1/2

ACC NR: AP6000635

process. Structural and stainless steel cutting was tested with these inorganic liquids as interelectrode media: oil-water emulsion, kaolin suspension in water, solution of NaCl, solution of NaCl and same with NaCl and $FeCl_3 \cdot 6H_2O$, solution of NaCl and KOH, soluble glass, and water. The best results were obtained with the NaCl-and-$FeCl_3$ solution: the electroerosion process combined with the electrochemical ensured a very clean cut surface and high efficiency. Detailed laboratory data is tabulated. Orig. art. has: 7 figures, 4 formulas, and 11 tables.

SUB CODE: 13 / SUBM DATE: none

Card 2/2

ACC NR: AT7006847 SOURCE CODE: UR/0000/66/000/000/0164/0172

AUTHOR: Pechuro, N. S. (Professor, Doctor of technical sciences); Gol'din, V. I.; Merkur'yev, A. N.

ORG: none

TITLE: Decomposition of pure hydrocarbons during electroerosive machining using a dynamoelectric pulse generator

SOURCE: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov. Khimicheskiye reaktsii organicheskikh produktov v elektricheskikh razryadakh (Chemical reactions of organic products in electric discharges), Moscow, Izd-vo Nauka, 1966, 164-172

TOPIC TAGS: electroerosion, alkane, aromatic hydrocarbon, cyclohexane

ABSTRACT: The effect of various types of hydrocarbons used as interelectrode media (n-heptane, n-octane, n-decane, tetradecane, cyclohexane, benzene, o-xylene, tetralin) on the chemical reactions taking place during electroerosive machining was studied under conditions approximating those prevailing in the operation of making holes (d = 20 mm) in steel parts. The power source was an MIG-2B dynamoelectric generator with a pulse repetition frequency of 600 cycles. The physicochemical properties of the pure hydrocarbons were found to have a considerable effect on the characteristics of the process of electroerosive machining of the metal. Empirical equations are derived

Card 1/2

ACC NR: AT7006847

for the decomposition of the hydrocarbons. Thermodynamic calculations and results of oscillographic analysis showed that the energy expended on the chemical processes varies widely and amounts to 5.52-27.92% of the total energy of the pulse for paraffins and cyclohexane, 1.73-6.52% for benzene and o-xylene, and 10.02-11.36% for tetralin. The erosion of the anode and the total electrode wear increase in the series: cyclohexane, paraffin hydrocarbons, aromatic hydrocarbons. Orig. art. has: 1 figure, 6 tables and 1 formula.

SUB CODE: 07,13/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 002

Card 2/2

ACC NR: AT7006848 SOURCE CODE: UR/0000/66/000/000/0173/0180

AUTHOR: Merkur'yev, A. N.; Pesin, O. Yu.; Pechuro, N. S. (Professor, Doctor of technical sciences)

ORG: none

TITLE: Study of the decomposition in condensed discharges of liquid organic products used as interelectrode media in electroerosive machining of metals

SOURCE: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov. Khimicheskiye reaktsii organicheskikh produktov v elektricheskikh razryadakh (Chemical reactions of organic products in electric discharges). Moscow, Izd-vo Nauka, 1966, 173-180

TOPIC TAGS: electroerosion, aromatic hydrocarbon, alkane, cyclohexane

ABSTRACT: Experiments were carried out in order to determine the nature of the decomposition of pure organic compounds used as interelectrode media in electroerosive machining when they are acted upon by condensed discharges. The compounds studied were representatives of paraffins, naphthenes, and aromatic hydrocarbons (n-heptane, n-octane, n-decane, n-tetradecane, benzene, o-xylene, tetralin, and cyclohexane). The yield of gaseous decomposition products was found to depend substantially on the type of medium. The maximum amount of gas was formed by the decomposition of paraffin hydrocarbons, and the minimum by the decomposition of aromatic compounds. Relation-

Card 1/2

ACC NR: AT7006848

ships were established between the structure of the molecule being decomposed and the nature and amount of the products. Empirical decomposition equations were derived, and the fraction of energy consumed by the chemical reactions was determined. The dependence of erosion on the nature of the interelectrode medium is discussed. Orig. art. has: 6 tables.

SUB CODE: 11, 07,13/ SUBM DATE: none/ ORIG REF: 002

Card 2/2

MERKUR'YEV, G.D., inzh.

Oil reclamation as an important means of improving the economy of diesel locomotive traction. Elek. i teplo. tiaga 2 no.2:21-22 F '58. (MIRA 11:4)

1. Glavnoye upravleniye lokomotivnogo khozyaystva.
(Diesel locomotives) (Oil reclamation) (Diesel fuels)

MERKUR'YEV, G.D.

New standards. Elek. i tepl. tiaga 3 no.3:22 Mr '59.
(MIRA 12:5)
(Diesel engines--Lubrication)

MERKUR'YEV, G.D.

Transformer oil for electric locomotives. Elek.i tepl. tiaga 5 no.12:36-38 D '61. (MIRA 15:1)
(Insulating oils)

VORONOV, Nikolay Mikhaylovich; BLIDCHENKO, Ignatiy Fedorovich; GONCHAROV, Viktor Mikhaylovich; LOBANOV, Vasiliy Vasil'yevich; MERKUR'YEV, Gennadiy Dmitriyevich; BLAGOVIDOV, I.F., kand. tekhn. nauk, retsenzent; EMINOV, Ye.A., inzh., retsenzent; GROMOV, G.N., inzh., retsenzent; LOSIKOV, B.V., prof., red.; SOBAKIN, V.V., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Petroleum fuel and lubricants in railroad transportation; handbook] Neftianoe toplivo i smazochnye materialy na zheleznodorozhnom transporte; spravochnik. Moskva, Transzheldorizdat, 1962. 322 p. (MIRA 16:6)
(Petroleum products) (Railroads--Fuel)

AM4007083 BOOK EXPLOITATION S/

Merkur'yev, Gennadiy Dmitriyevich

Lubricants and their use in electric rolling stock (Smazochny*ye materialy* i ikh primeneniye v elektropodvizhnom sostave) Moscow, Transzheldorizdat, 63. 0125 p. illus., biblio. 5,000 copies printed.

TOPIC TAGS: lubrication, lubricating oil, electric traction, packing material

PURPOSE AND COVERAGE: The book contains brief information on the main physical and chemical properties of oils and lubricants, and a detailed description of the conditions under which lubricants can be used in rubbing parts of electric rolling stock. Norms for lubricant consumption are presented. The book is intended for mechanics specializing in electric rolling stock, their helpers, and the railroad yard repair personnel. Principal attention is paid to the quality of lubricating oil and its applications. General problems involving friction, oil refining, and manufacture of lubricating oil are mentioned only briefly.

TABLE OF CONTENTS [abridged]:

Card 1/2

AM4007083

SUB CODE: FL, PR SUBMITTED: 04Feb63 NR REF SOV: 019

OTHER: 000 DATE ACQ: 30Nov63

Card 2/2

L 01806-67 EWT(m)/T DJ

ACC NR: AP6030589 (AN) SOURCE CODE: UR/0413/66/000/016/0073/0073

44

B

INVENTOR: Ismailov, R. G. A. O.; Mamedov, M. A. A. O.; Spektor, Sh. Sh.; Seidov, M. M. M. O.; Vartapetov, A. A.; Shchelkonogov, I. A.; Kyazimov, A. A. O.; Aliyev, A. A. G. O.; Tangiyeva, T. A.; Kesel'man, L. G.; Lobanov, V. V.; Chikunov, V. A.; Blidchenko, I. F.; Tarumov, G. A.; Bombandirov, P. P.; Merkur'yev, G. D.; Petrov, S. A.

ORG: none

TITLE: Lubricating oil for bushings. Class 23, No. 184997

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 73

TOPIC TAGS: lubricant, bushing, petroleum

ABSTRACT: An Author Certificate has been issued describing a lubricant for bushings, with a solar fraction and mazut base. To expand the operating temperature range of the oil, a petroleum fraction with a boil-away of 4—5% at 240—320C is added to the lubricant. This fraction is obtained from the petroleum distillate at 300—310C. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 05Nov64/

UDC: 629.11.012.26

Card 1/1

MERKUR'EV, G. M.

Cotton Carding

Reducing the irregularity of lap by changing the drawing in picking machines., Tekst. prom., 12, No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

MERKUR'YEV, Gennadiy Sergeyevich; SAVOST'YANOV, Yevgeniy Ivanovich; MERIN, B.M., red.; MAKAROVA, N.F., tekhn. red.

[Brigades and the shock workers of communist labor]Brigady i udarniki kommunisticheskogo truda. Moskva, Uchpedgiz, 1962. 123 p. (MIRA 16:3)
(Socialist competition) (Communist youth league)

MERKUR'YEV, I.

USSR/ Electronics - Material testing

Card 1/1 Pub. 89 - 24/30

Authors : Merkur'yev, I.

Title : Gamma defectoscope

Periodical : Radio 1, 52 - 55, Jan 56

Abstract : An account is given of the use of the penetrating property of gamma rays to locate hidden defects in metal parts. Two methods are described - one called the photographic method and the other the ionization method. The former produces a photographic image on which hollow places in an object are revealed through greater penetration of the rays, and the latter records their penetration on the Geiger counter principle. Technical details of the parts of the apparatus are given with directions for their assembly. Illustrations; diagrams; graphs.

Institution : .....

Submitted : .....

MERKUR'YEV, I.

107-57-6-15/57

AUTHOR: Merkur'yev, I.

TITLE: Burning Issues (Nabolevshiye voprosy)

PERIODICAL: Radio, 1957, Nr 6, p 11 (USSR)

ABSTRACT: A new AF 20-watt amplifier designed by the author was displayed at the Ninth All-Union Exhibition of the Radio Amateurs. It won fourth prize. Its description was submitted to the Ministry of Communications; the Ministry never replied. A description of a new gamma-ray crack detector, submitted to the Ministry of Radio Engineering Industry, was shelved there for over five months; it was examined only after interference by public organizations. The author has designed over fifty various instruments during twenty years. He finds that very little attention is paid to the important matter of radio amateur inventions. Currently, he is developing a new portable dosimeter with AC supply, weight under 1 kg.

AVAILABLE: Library of Congress

Card 1/1

BOLOTOVSKAYA, T.P.; BOLOTOVSKIY, I.A., kand. tekhn. nauk, dots.; BOCHAROV, G.S.; GULYAYEV, V.I.; KURLOV, B.A.; MERKUR'YEV, I.A.; SMIRNOV, V.E.

[Handbook on the geometrical calculation of involute toothed and worm gears] Spravochnik po geometricheskomu raschetu evol'ventnykh zubchatykh i cherviachnykh peredach. [By] T.P. Bolotovskaia i dr. Moskva, Mashgiz, 1963. 472 p. (MIRA 17:4)

MERKUR'YEV, I. S. Cand Tech Sci -- (diss) "Development of designs and methods for the hydraulic calculation of automatic tubular water-meter regulators." Mos, 1957. 23 pp with diagrams (Min of Agriculture USSR. VASKHNIL. All-Union Sci Res Inst of Hydraulic Engineering and Improvement), 100 copies (KL,5-58, 102)

MERKUR'YEV, I.S.

Automatic tubular water meter and regulator used in irrigation systems. Biul. tekh.-ekon. inform. no.1:61-62 '57. (MIRA 11:4)
(Irrigation)

98-58-3-13/22

AUTHOR: Merkur'yev, I.S., Candidate of Technical Sciences

TITLE: Letters and Comments of the Readers (Pis'ma i otkliki chitateley. Hydraulic Resistances on Head Water Discharges (Gidravlicheskiye soprotivleniya na vkhod napornykh vodovypuskov)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stvo, 1958, Nr 3, pp 46 - 48(USSR)

ABSTRACT: Based on a Bernoulli equation, calculations are presented to determine hydraulic resistances on head water discharges. The author critically appraises the calculations offered by I.A. Zababurin on the same problem. There are 2 graphs and 4 Soviet references.

Card 1/1 1. Bernoulli equations-Applications 2. Fluid flow-Resistance-Mathematical analysis

MERKUR'YEV, I.S., kand. tekhn. nauk

Automation of structures in irrigation systems. Gidr. i mel. 15 no.6:25-31 Je '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii im. Kostyakova.

MERKUR'YEV, I.S., kand.tekhn.nauk

Lightweight hydrant-type sluice gates of irrigation systems with distributing pipelines. Gidr. i mel. 14 no.7.40-46 '62.(MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii.

BELOSTOTSKIY, Anatoliy Avrumovich; VAL'DENBERG, Yuriy Stanislavovich; MERKUR'YEV, Leonid Ivanovich; Prinimal uchastiye DAVYDOVSKIY, A.K.; SHENEROT, I.M., red.

[Use of electronic computers in the automation of industrial processes] Primenenie vychislitel'nykh mashin dlia avtomatizatsii proizvodstvennykh protsessov. Moskva, Energiia, 1964. 238 p. (MIRA 17:12)

ACC NR: AM6004715 Monograph UR/

Belostotskiy, Anatoliy Avrumovich; Val'denberg, YUriy Stanislavovich; Merkur'yev, Leonid Ivanovich

Use of computers for the automation of production processes (Primeneniye vychislitel'nykh mashin dlya avtomatizatsii proizvodstvennykh protsessov) Moscow, Izd-vo "Energiya", 1964. 238 p. illus., biblio. 9800 copies printed.

TOPIC TAGS: computer, automation equipment, industrial automation, automatic control system, automatic control, computer application

PURPOSE AND COVERAGE: The book is intended for a wide circle of technicians concerned with the automation of various production processes. It describes the basic problems involved in the use of computers for the control of these processes. Numerous examples taken from Soviet and foreign practice show the role and the position of control computers in different technological processes. Scientific and technical problems arising with the utilization of control computers, as well as trends in their development, are discussed. The main emphasis is placed on the use of control computers in chemistry, power engineering, metallurgy, and transportation. The introduction and chapters 1, 2 and 3 (except §§ 3-1 and 3-4) were written by Yu. S. Val'denberg, §§ 3-1 and 3-4 by A. K. Davydovskiy,

UDC 681.140

Card 1/4

ACC NR: AM6004715

chapter 4 (except §§ 4-5) and §§ 6-3, 6-5, and 6-6 by L.I. Merkur'yev, chapter 5 and §§ 4-5, 6-1, 6-2, and 6-4 and the appendix by A. A. Belostotskiy. Materials on Soviet control computers were furnished by V. M. Kagan, B. N. Malinovskiy, N. I. Borodin, and G. I. Gil'man.

TABLE OF CONTENTS:

Card 2/4

ACC NR: AM6004715

Card 3/4

ACC NR: AM6004715

SUB CODE: 09/ SUBM DATE: 14Nov64/ ORIG REF: 058/ OTH REF: 043/

Card 4/4

MERKUR'YEV, N., inzhener.

High-speed entry driving. Mast.ugl. 5 no.6:26 Je '56. (MLRA 9:8)
(Pechora Basin--Coal mines and mining)

MERKUR'YEV, Nikolay Dmitriyevich; ABKEVICH, P.L., red.izd-va; BYKOVA, V.V., tekhn.red.

[Prospecting for asbestos] Asbest i ego poiski. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr, 1959. 26 p. (MIRA 13:7)
(Asbestos)

MERKUR'YEV, Nikolay Dmitriyevich; ABKEVICH, P.L., red. izd-va; BYKOVA, V.V., tekhn. red.

[Asbestos and searching for it]Asbest i ego poiski. Izd.2. Moskva, Gosgeoltekhizdat, 1962. 23 p. (MIRA 15:11)
(Asbestos)

MERKUR'YEV, N.D. (Moskva)

Problems of prevention and treatment of thromboembolism in the system of the pulmonary artery. Klin.med. no.4:148-151 '62. (MIRA 15:5)

(PULMONARY EMBOLISM)

MERKUR'YEV, N.D.; SUDERKIN, A.I.

Specific features of prospecting for deposits of piezooptical raw materials. Razved. i okh. nedr 27 no.1:15-18 Ja '61. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut p'yezoopticheskogo syr'ya.

112-1-1421

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 215 (USSR)

AUTHOR: Merkur'yev, N.K.

TITLE: Mechanization of Production Operations at the Plant "Proletariy" (Mekhanizatsiya proizvodstvennykh protsessov na zavode "Proletariy")

PERIODICAL: Inform. tekhn. sb. M-vo elektrotekhn. prom-sti SSSR, 1956, Nr 5 (89), pp.13-18.

ABSTRACT: Bibliographic entry

Card 1/1

S/196/61/000/011/014/042
E194/E155

AUTHORS: Bukhman, G.D., and Merkur'yev, P.T.

TITLE: A luminescent method for finding leaks in (steam) condensers

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika no.11, 1961, 28, abstract 11G 166 (Elektr. stantsii, no.4, 1961, 86-87)

TEXT: Experience with the method in high- and medium-pressure power stations of the Sverdlovenergo system is described. The luminophores used were (I) fluorescine, and (II) sodium fluorescinate. Because of the poor solubility of (I), caustic soda is added to the water when it is used. In preparing the condenser for hydraulic testing, a quarter of the volume of the steam space is filled with water, then solution (II) is added, after which the condenser is filled with water to above the tube level. The condenser pump is operated through the recirculation line for 25-30 minutes to ensure good mixing of the solution. The fluorescine concentration should be greater than 5 mg/litre.

Card 1/2

A luminescent method for finding . . S/196/61/000/011/014/042
E194/E155

When looking for leaks the lamp should be moved along the tube plate from top to bottom at a distance of 50 70 mm from the tubes in a darkened water chamber. Solution which escapes through small leaks in the tube system shines with a bright yellow-green colour. Lamp type [illegible] (UFO-4A) with glass grade [illegible]6 (UFS-6) was used. Supply was at 12 V a.c. The test lasted 4 to 8 hours.

[Abstractor s note: Complete translation.]

Card 2/2

MERKUR'YEV, S.A.

Put the use of mineral fertilizers under control. Zemledelie 27 no.5:81 My '65. (MIRA 18:6)

1. Predsedatel' Irkutskogo oblastnogo komiteta partiyno-gosudarstvennogo kontrolya.

YEMEL'YANOV, V.P.; SKROBOV, V.; KONDYBKO, P.; ILYUKOVICH, B.M.; MERKUR'YEV, S.Ye.; SARAPULOV, Yu.V.

In the country's rolling mills. Metallurg 9 no.12:34-35 D '64. (MIRA 18:2)

1. Magnitogorskiy metallurgicheskiy kombinat (for Yemel'yanov). 2. Zavod "Krasnaya Etna" (for Skrobov, Kondybko). 3. Chusovskoy metallurgicheskiy zavod (for Ilyukovich, Merkur'yev). 4. Cherepovetskiy metallurgicheskiy zavod (for Sarapulov).

ILYUKOVICH, B.M.; MERKUR'YEV, S.Ye.

Rolling special lighweight shape 020B1 wheel rims for the GAZ 53 automobile. Metallurg 10 no.4:26-27 Ap '65. (MIRA 18:7)

1. Chusovskoy metallurgicheskiy zavod.

ILYUKOVICH, B.M., starshiy kalibrovshchik; MERKUR'YEV, S.Ye., kalibrovshchik

Rolling of special sections for the screens of jigging machinery. Metallurg 10 no.5:30-31 My '65. (MIRA 18:6)

1. Chusovskoy metallurgicheskiy zavod.

YEMEL'YANOV, V.P.; ILYUKOVICH, B.M.; MERKUR'YEV, S.Ye.; FOMENKO, G.G.

In the rolling mills of the land. Metallurg 10 no.12:38 D '65.
(MIRA 18:12)

1. Chusovskiy metallurgicheskiy zavod (for Ilyukovich, Merkur'yev).

KOZHEVNIKOV, A.; MERKUR'YEVA, A.

Augment credit relations with the petroleum industry. Den.i kred. 15 no.3:8-12 Mr '57. (MLRA 10:5)
(Petroleum industry--Finance)

22571
S/190/61/003/005/014/014
B110/B230

15 9202 2209, 1436, 1474

AUTHORS: Yerusalimskiy, B. L., Merkur'yeva, A. V., Baykova, N. P.

TITLE: Polymerization of chloroprene under the influence of organometallic compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961, 798

TEXT: Data published on the polymerization of chloroprene by methods other than initiation by free radicals disclose nothing about polymerization in the presence of conventional organometallic compounds. The present authors found the polymerization of chloroprene under the influence of organolithium and organomagnesium compounds to be possible. Butyl lithium and the system $[C_4H_9MgI + (C_4H_9)_2Mg]$ were used as initiators of polymerization. This system, formed in the course of the organomagnesium synthesis in hydrocarbon, has already been applied together with other organomagnesium compounds for the polymerization of isoprene. Under the influence of the system butyl magnesium iodide - dibutyl magnesium the polymerization of chloroprene takes place at a considerable rate between 40 and 60°C. At a concentration of the initiator of 0.012 to 0.025 and of the

Card 1/2

S/190/61/003/005/014/014
B110/B230

Polymerization of...

monomer of 2.5 moles/l, conversion amounts to ~5 per cent per hour at 60°C at the beginning of the reaction. Applying butyl lithium and a concentration of the initiator of 0.008 and of the monomer of 4.0 moles/l, conversion is 2 per cent per hour at 35°C at the beginning of the reaction. Polymers obtained in hexane under the conditions described are soluble in benzene to a limited extent (~50 per cent). Temperature of vitrification varies from -46 to -50°C for the individual specimens. [Abstracter's note: Essentially complete translation]. There are 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc.

SUBMITTED: January 28, 1961

Card 2/2

S/190/62/004/009/005/014
B101/B144

AUTHORS: Dolgoplosk, B. A., Yerusalimskiy, B. L., Kavunenko, A. P., Merkur'yeva, A. V.

TITLE: Polymerization of diene hydrocarbons under the action of organomagnesium compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 9, 1962, 1333-1337

TEXT: The polymerization of butadiene (I), 2,3-dimethyl butadiene (II), and chloroprene (III) by the system $(C_4H_9)_2Mg$ - C_4H_9MgI was studied under the same conditions as that of isoprene described previously (Vysokomolek. soyed., 2, 541, 1960). Results: (1) A solution of 25 - 30 mole% I in hexane yielded ~10% polymer with 77 - 75% 1,4 bonds at 100°C. Under the same conditions, II yielded ~40% polymer with 97% 1,4 bonds. The polymerization proceeds more slowly than that of isoprene. The polymers are completely soluble in benzene and have lost ~6-8% of their double bonds. It is assumed, therefore, that an intramolecular cyclization occurs. (2) The polymerization of III in hexane at 40 - 60°C yielded up to 20% polymer. The polymers had limited solubility in benzene, and their glass transition

Card 1/2

point was -46 to -49°C. (3) The consumption of organomagnesium initiators during the polymerization of isoprene was studied. The content in C_4H_{10} liberated by H_2SO_4 was determined chromatographically. The continuous decrease in initiator concentration and the continuous increase in molecular weight during the reaction suggest a consecutive organometal synthesis. Monomer addition to the C-Mg bond is comparatively slow. There are 1 figure and 4 tables.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds AS USSR)

SUBMITTED: May 20, 1961

MERKUR'YEVA, L. A.

79-1-23/63

AUTHORS: Kal'yan, Kn. V., Lerman, Z. A., Merkur'yeva, L. A.

TITLE: Hydrogenation in the Presence of Colloidal Palladium (Gidrirovaniye v prisutstvii kolloidal'nogo palladiya)
IX. Hydrogenation of Vinylpropyl- and Vinylbutyl-Acetylene
(IX. Gidrirovaniye vinilpropil - i vinilbutilatsetilenov)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 1, pp.110-116(USSR)

ABSTRACT: One of the authors earlier investigated the hydrogenation of two close homologues of vinylacetylene, namely vinylmethyl- and vinylethyl-acetylene. It was of interest to test the same reaction also on other derivatives of vinylacetylene with a longer chain of atoms. For this purpose the authors hydrated vinylpropyl- and vinylbutyl-acetylene in the presence of colloidal palladium. The hydrogenation products were separated from the initial product and the mixture of olefines and diolefines brominated. According to the quantity of di- and tetra-bromides separated by vacuum distillation it was possible to conclude the proportional quantity of olefines and

Card 1/3

79-1-23/03

Hydrogenation in the Presence of Colloidal Palladium. IX. Hydrogenation of Vinylpropyl- and Vinylbutyl-Acetylene

diolefines. The physical constants of the ozonolysis and the condensation with maleic-acid anhydride gave information on the structure of the olefines and diolefines regenerated with zinc from the bromides. According to the nature of the curve which gives the velocity process it can be seen that the hydrocarbons to be investigated are almost not different from their earlier investigated homologues, vinylmethyl- and vinylethyl-acetylene (see diagram). On the basis of the investigations it was thus determined that in the hydrogenation of vinylpropyl- and vinylbutyl-acetylene in the presence of colloidal palladium the addition of hydrogen takes place in the same manner as in vinylmethyl- and vinylethyl-acetylene, i.e. at the triple bond, the further hydrogenation of the developing dienes to the corresponding ethylene hydrocarbons taking place simultaneously. It was found that the addition of a small amount of p-chlorobenzene thiocyanate increases the selection of the hydrogenation process. Octadiene-1,3; 1,2,3,4-tetrabromoheptane and tetrabromooctane were characterized for the first time; the exact constants for heptadiene-1,3 were described. There are 1 figure, 2 tables, and

Card 2/3

79-1-23/63

Hydrogenation in the Presence of Colloidal Palladium. IX. Hydrogenation of Vinylpropyl- and Vinylbutyl-Acetylene

9 references, 7 of which are Slavic,

ASSOCIATION: **Leningrad Technological Institute imeni Lensovet**
(Leningradskiy tekhnologicheskiy institut im. Lensoveta)

SUBMITTED: January 4, 1957

AVAILABLE: Library of Congress

Card 3/3 1. Chemistry 2. Hydrocarbons 3. Mathematical analysis

USSR/Farm Animals. Cattle. Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78728.

Author : Merkur'yeva, N.V.; Koledov, A.F.
Inst : Altay Kray Scientific-Research Veterinary Station.
Title : On Periods of Mating of Cows After Calving.

Orig Pub: Sb. nauch. rabot. Altaysk. kraysvoy n.-i. vet. st., 1957, vyp. I, 192-197.

Abstract: No abstract.

Card : 1/1

24

BAKULEV, A.N.; STEPANYAN, A.N.; MERKUR'YEVA, R.V.

Chemical, electrophoretic and chromatographic examination of carbohydrates bound with blood serum proteins in coronary insufficiency before and after surgical interventions. Kardiologiia 1 no.5:22-29'61 (MIRA 17:4)

STEPANYAN, Ye. P., prof.; MERKUR'YEVA, R.V.

Electrophoretic and chromatographic analysis of glycoproteins in the blood serum of patients with defect of the mitral valve. Terap. arkh. 34 no.10:84-89 O'62 (MIRA 17:4)

1. Iz biokhimicheksoy laboratorii (zav. - prof. Ye.P. Stepanyan) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A. Kolesnikov) AMN SSSR; nauchnyy rukovoditel' - akademik A.N. Bakulev.

S/020/62/147/005/032/032
B144/B186

AUTHORS: Stepanyan, Ye. P., Merkur'yeva, R. V., Geselevich, Ye. L.

TITLE: Experimental study of metabolic acidosis in deep hypothermia

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 5, 1962, 1250-1252

TEXT: Since narcosis with hypothermia produces often metabolic acidosis, it was important to clear up the role of hypothermia in itself. This was done by determining in heart, brain, skeletal muscles and suprarenal glands of narcotized dogs (temperature in the mediastinum 10°C) the contents of lactic, pyruvic and ascorbinic acids, the glycolysis, the content of protein and its fractions, the blood viscosity, the electrolytes, the pH, and the blood sugar. The tests were conducted in 3 groups: blood circulation interrupted for 30 min (I); for 60 min (II); for 30 min followed by warming to 37°C (III). Results: (I) The lactic acid content dropped in heart and suprarenal glands and increased in brain and muscle. Glycolysis changed in the same sense with exception of the muscle. (II) Marked increase of lactic acid content and glycolysis in heart and brain. (III) Maxima of both levels in the brain. In the

Card 1/2

brain aerobic glycolysis was observed also. This is explained by adaptation reactions. A blood sugar content up to 300 mg-% and a pH shift toward acid values were observed with maximum cooling, both returning gradually to normal values with the restoration to normal body temperatures. The protein analysis revealed hypoproteinemia with reduction of the albumins and increase of α_1, α_2 and μ globulins. The blood viscosity was also reduced. The changes in pyruvic acid and electrolytes were insignificant. The ascorbinic acid level dropped initially in all tissues, it then increased sharply after 60 min in the suprarenal glands and in all tissues after warming-up to 37°C. This again is attributed to adaptation. It is concluded that metabolic acidosis is not due to hypothermia proper, but to interruption of the blood circulation and to warming-up. There are 2 figures.

ASSOCIATION: Institut serdechno-sosudistoy khirurgii Akademii meditsinskikh nauk SSSR (Institute of Cardio-vascular Surgery of the Academy of Medical Sciences USSR)

PRESENTED: May 21, 1962, by A. N. Bakulev, Academician
SUBMITTED: May 21, 1962
Card 2/2

MERKUR'YEVA, R.V.

AID Nr. 976-1 24 May

TISSUE RESPIRATION AND ADENOSINETRIPHOSPHATASE ACTIVITY IN DOGS IN DEEP HYPOTHERMIA (USSR)

Stepanyan, Ye. P., R. V. Merkur'yeva, and Ye. L. Geselevich. Byulleten' eksperimental'noy biologii i meditsiny, v. 55, no. 3, Mar 1963, 45-48.
S/219/63/055/003/001/001

A study was made on the effects of deep hypothermia on the tissue respiration and adenosinetriphosphatase activity in the brain, heart, adrenals, and skeletal muscles of mongrel dogs. Extracorporeal cooling to 10°C in the mediastinum and subsequent warming of the hypothermic animals by means of an apparatus filled with blood at 0°C and 37°C, respectively, was completed in 10 to 15 min. Three series of experiments were conducted. The blood circulation was arrested for 30 min in series (I) and for 60 min in series (II); in series (III) the animals were rewarmed to normal temperature after a 30-min circulatory arrest. Deep hypothermia caused marked changes in the tissue respiration, particularly in the brain tissue, manifested by diminished consumption of oxygen (17% of the normal) and reduced excretion of carbon dioxide (12.5% of the normal); profound disturbances in the decarboxylation

Card 1/2

AID Nr. 976-1 24 May

TISSUE RESPIRATION [Cont'd] S/219/63/055/003/001/001

processes were noted. The activity of adenosinetriphosphatase in all tissues, particularly in the brain tissue, was reduced by deep cooling. Changes in tissue respiration were almost identical in series I and II. Enzyme activity in the cardiac and skeletal muscles was affected by the length of the circulatory arrest (it was more inhibited by the 60-min arrest in series II). The changes in the enzyme activity in the brain tissue were almost identical in series I and II. Rewarming of the hypothermic animals and incubation of the cooled tissues at 37°C increased the tissue respiration and adenosinetriphosphatase activity in all tissues. The data obtained show that changes induced by deep hypothermia are reversible.

[SGM]

Card 2/2

BEREZOV, Yu.Ye.; MERKUR'YEVA, R.V.; GRIGORYAN, D.G.

Study of carbohydrates combined with proteins in the aortic wall in atherosclerosis. Dokl. AN SSSR 155 no.6:1444-1446 Ap '64.
(MIRA 17:4)

1. Institut serdechno-sosudistoy khirurgii AMN SSSR. Predstavleno akademikom A.N.Bakulevym.

BALABA, T.Ya., doktor med. nauk; MERKUR'YEVA, R.V., kand. biol. nauk; MIKHEL'MAN, M.D., doktor med. nauk; MIKHAYLOVA, N.M., kand. med. nauk

Biochemical study of the protein-carbohydrate complexes of the blood serum in patients with arthrosis deformans of the hip joint; preliminary report. Ortop., travm. i protez. 26 no. 10:3-9 O '65. (MIRA 18:12)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. - chlen-korrespondent AMN SSSR prof. M.V.Volkov). Adress avtorov: Moskva A-299, ul. priorova d. 10 TSentral'nyy institut travmatologii i ortopedii. Submitted May 23, 1964.

GRIGOR'YAN, D.G.; NAZARENKO, N.A.; LYSENKO, V.B.; MERKUR'YEVA, R.V.; ZYKOV, Yu.V.; MAKOVEYEVA, G.M.

Dynamics of antibody formation and the fractional composition of blood serum glycoproteins in immunization with tissue antigens. Biul. eksp. biol. i med. 60 no.7:75-78 Jl '65. (MIRA 18:8)

1. Eksperimental'nyy otdel (zav.- prof. P.E. Vasilenko), biokhimicheskaya laboratoriya (zav.- dotsent V.A. Shalimov) TSentral'nogo institut kurortologii i fizioterapii (direktor - kand. med. nauk G.N. Pospelova), laboratoriya immunokhimii (zav.-prof. V.S. Gostev) Instituta eksperimental'noy biologii AMN SSSR (direktor - prof. I.N. Mayskiy) i biokhimicheskaya laboratoriya (zav.- prof. Ye.P. Stepanyan) Instituta serdechno-sosudistoy khirurgii (direktor - prof. S.A. Kolesnikov) AMN SSSR, Moskva.

MALAFEYEVA, Ye.P.; MEHAUR'YEVA, Ye.D.; KURASEV, S.M.

Experience in the production of yarns and fiber cloth from nitron. Tekst. prom. 24 no.5:34-37 My '64.

(MIRA 17:7)

1. Zaveduyushchiy fabrikoy No.1 Yaroslavskogo kombinata tekhnicheskikh tkaney "Krasnyy Perekop" (for Malafeyeva).
2. Nachal'nik laboratorii fabriki No.1 Yaroslavskogo kombinata tekhnicheskikh tkaney "Krasnyy Perekop" (for Mekhaur'yeva).
3. Nachal'nik tekhnicheskogo otdela fabriki Yaroslavskogo kombinata tekhnicheskikh tkaney "Krasnyy Perekop" (for Kurasev).

Fish Culture; Trout

Heterospermal fertilization of rainbow trout eggs. Agrobiologiia No. 1, 1952.
Kandidat S.-Kh. Nauk Kafedra Genetiki Moskovskogo Gosudarstvennogo Universiteta imeni Lomonosova

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

KRUSHINSKIY, L.V., doktor biologicheskikh nauk; MERKUR'YEVA, Ye.K., kandidat sel'skokhozyaystvennykh nauk; IZRAILEVICH, I.Ye., kandidat veterinarnykh nauk; IL'INSKIY, S.A., veterinarnyy vrach; IN'KOV, N.M., veterinarnyy vrach; STOGOV, K.S., veterinarnyy vrach; VANICHEV, M.I.,veterinarnyy vrach; MAZOVER, A.P., veterinarnyy vrach; ORLOV, A.P., veterinarnyy vrach; RYLOV, V.V., teterinarnyy vrach; SAKHAROV, N.A., veterinarnyy vrach; DIKAREV, P.I., redaktor; MUSHTAKOVA,L., tekhnicheskiy redaktor

[The working dog; manual for training specialists in raising work dogs] Sluzhebnaia sobaka; rukovodstvo po podgotovke spetialistov sluzhebnogo sobakovodstva. Moskva, Gos. izd-vo selkhoz. lit-ry, 1952. 616 p. (MLRA 10:1)

(Dogs--Training)

ISAYEV, S.I.;MERKUR'YEVA, Ye.K.;STROGANOVA, N.S.;FEPGINSON, N.I.

Critique of new concepts in science from the position of old concepts; discussion on N. V. Turbin and M. D. Ivanov article. "Izv. Akad. nauk SSSR; Ser. Biol. no.2:34-48 Mar-Apr 1953. (CIML 24:3)

MERKUR'YEVA, Ye.K., kandidat sel'skokhozyaystvennykh nauk.

Academician M.F. Ivanov. Est. v shkole no.5:18-24 S-O '56.
(MLRA 9:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Ivanov, Mikhail Fedorovich, 1871-)

MERKUR'YEVA, Ye.K.; FUDEL', T.P.; TAL'SKAYA, I.N.; AL'BITSKAYA, A.N.

Experimental proof of the possibility of obtaining three-breed hybrid chickens in the first generation. Uch. zap. Mosk. un. no.186:103-117 '56. (MLRA 9:12)

(Hybridization) (Poultry breeding)

MERKUR'YEVA, Ye.K.

Biological characteristics of three-breed hybrid chickens obtained by heterospermous fertilization. Uch. zap. Mosk. un. no.186:119-150 '56. (MLRA 9:12)

(Hybridization) (Poultry breeding)

USSR / Farm Animals. General Problems Q

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21417

Author : Merkur'yeva Ye K., Kudryashov N. V., Zvaygzne G. F., Kuznetsov N. V.

Inst :

Title : The Breeding of Cattle of the Jersey Breed (Razvedeniye krupnogo rogatogo skota dzherzeyskoy porody)

Orig Pub: Zhivotnovodstvo, 1957, No 6, 60-69

Abstract: In order to increase the fat-milk production of East Friesian crossbred cattle by way of interbreeding with sires of the Jersey breed, Jerseys were brought into the USSR in 1955. 110 heifers and 3 young bulls were sent to the state farm "Nekrasovo" in the Ryazan' Oblast. During a period of one year, 105 heifers produced 107 calves which developed well and possessed early sex maturity, a characteristic trait of

Card 1/3

[illegible] milk and [illegible] kg. of milk fat, and that of the East Friesians - 846 and 27.7 kg., respectively. In

Card 2/3

USSR / Farm Animals. General Problems Q

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21417

Abstract: 28 Jersey cows, the fat content of milk reached 6.8%. The Jersey cattle brought in descended from several inbred lines (III-II and nearer), as well as from inter-line crosses. The Jersey cows, under conditions prevailing in the Ryazan' Oblast, retained the characteristics of their breed, i.e. milk fat production, steadiness of milk yield and early maturity. They developed well.

Card 3/3

MERKUR'YEVA, Ye.K.

Biological characteristics of Jersey cattle acclimatized in Ryazan province in connection with their prospective utilization in cross-breeding for increased butterfat percentage. Nauch. dokl. vys. shkoly; biol. nauki no.2:152-156 '58. (MIRA 11:10)

1.Predstavlena kafedroy genetiki i lesektsii Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(Ryazan Province--Jersey cattle)